

CRM AND HUMAN FACTORS TRAINING: WHAT AIR NEW ZEALAND IS DOING ABOUT IT¹

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BACKGROUND

The authors of this paper have played an integral role in Air New Zealand's evaluation of CRM and Human Factors training options available to date. As the final decision as to which course is best suited to Air New Zealand's needs has yet to be made, this paper will briefly outline: 1) why this form of training was considered necessary; 2) the approach taken to evaluating the options available; 3) some of the problems encountered on the way; and 4) some plans for the future.

OVERVIEW

Along with many other airlines, Air New Zealand recognized human factors as the major cause of aviation accidents and incidents worldwide. Feedback from our own Flight Safety Committee together with information from other operators suggested that the training offered by CRM and Human Factors courses was necessary in terms of accident prevention, and to further enhance the standard of operation. The problem that soon became apparent with the number and variety of courses offered, was which one would be most suitable for Air New Zealand aircrew?

Over two years have past since members of the Flight Safety Committee were first given the task of evaluating the types of training available. Other personnel have become involved, including a professional aviation psychologist. The approach taken was to experience and report back on each of the courses and to this end, Flight Operations personnel have attended United's CRM program, the Qantas Human Relations Training program, Ansett Airlines of Australia KHUFAC program (the human factors training program developed by KLM), and Trans Australia Airlines (TAA) Aircrew Team Management (ATM) training program. Also attended were the more in-depth Human Factors in Transport Aircraft Operation (HFTAQ) course offered by Captain F. Hawkins (KLM) and Professor E. Edwards² and conferences (such as that sponsored by Ohio State University in 1985), where this type of training was discussed.

¹ Any queries regarding points raised in this paper can be addressed to the authors: Air New Zealand, Private Bag, Auckland, New Zealand.

² This course was held in Australia in 1985. It was sponsored by Ansett Airlines, and was similar in format to that conducted by the University of Aston in England.

Many problems were encountered during this time, and those with relevance to other airlines are reported here. Two of the biggest problems can be put together under the heading of line pilot acceptance. Resistance to change and resistance to jargon have plagued, and will continue to plague, the evaluation and implementation of this type of training. Likewise cynicism and skepticism have been, and will continue to be, encountered. These attitudes are now viewed as normal, and more importantly, as a necessary requirement for demonstrating attitude change. Working in an environment where these attitudes prevail, however, is potentially unrewarding for proponents of Human Factors or CRM training.

Another problem encountered involves the sometimes unexpected and often dramatic *cultural differences* in *how* the training is given. For the average Air New Zealand pilot (if such a pilot exists) there appears to be a resistance to the North American approach, and, to a lesser extent, the Australian approach. This resistance may stem from a more conservative education/schooling system in New Zealand. Any course contemplated needs to be modified in-house in order for it to be suitable in this regard.

Economic pressures are also a problem. Finding additional training days is becoming increasingly difficult, and there is pressure to fit a new training package into the existing system. Encouragement has been received, however, by the regulatory authorities and airline management who see the need for a review of current training time allocation. It is almost inevitable that once this form of training is considered, that existing training philosophy and requirements are re-examined.

Another major problem that exists is the *long-term needs*. In the short-term, the flight-deck orientation of some of the courses offered suits the immediate needs and concerns of Air New Zealand aircrew. There is a need, however, for the industry to provide training in those Human Factors areas which are not (or more appropriately have not been in the past) addressed by the education/schooling system.

The authors of this report are now in the position to recommend the type of training which is most suited to Air New Zealand. Following the purchase of a flight-deck oriented package currently available, there will be a need for in-house modification prior to implementation. It is expected that the regulatory authorities (Civil Aviation Division of the Ministry of Transport, NZ) and the Airline Pilots Association will have an input, along with individual aircrew who may wish to become more involved in the initial modification phase. Promotion of the course to line pilots will also be important at this time.

Following the modification phase, the first course to line pilots (other than a train-the-trainer course), will be given to a cross-section of aircrew. Priority in attendance would be given to new-hires, pilots undergoing command training and/or type change, and line superintendents and instructors. Pilots who are "stable on type" would have the lowest priority initially.

Each successive course would be reviewed and evaluated by both participants and course presenters. Effectiveness of the training will also be monitored, using both objective and subjective methods. Ongoing research will consider a standardized

approach to LOFT across all fleets and the development of a refresher training package. As previously noted, there may be a need in the future to supplement a course of the type recommended with a broad-based Human Factors education program.

Information obtained at this conference, especially with regard to the implementation and effectiveness of CRM/Human Factor training, will play an important part in the final evaluative step taken by Air New Zealand.